## REPORT RESUME.

ED 011 597

THE DEVELOPMENT OF THE MECHANICS OF FILM RATING.
BY- HANDY, RICKI AND OTHERS
REPORT NUMBER BR-5-0249-8

CONTRACT OEC-6-10-108

EDRS PRICE MF-\$0.09 HC-\$1.20

30P.

DESCRIPTORS- BEHAVIOR RATING SCALES, SOUND FILMS, \*INTERACTION PROCESS ANALYSIS, GROUP DYNAMICS, TEACHER EVALUATION, \*EVALUATION TECHNIQUES, AUDIO EQUIPMENT, \*SCORING, \*FILMS, \*INSTRUCTIONAL TECHNOLOGY, FEEDBACK, AUSTIN

A TRANSCRIPTION WAS MADE OF A GROUP DISCUSSION DEALING WITH THE DEVELOPMENT OF RATING SCALES AND THE TECHNIQUES OF FILM RATING AND OF USE OF THE EQUIPMENT. THE AMIDON-FLANDERS INTERACTION ANALYSIS SCALE WAS USED AS THE DASIS FOR THE DEVELOPMENT OF THE FILM ANALYSIS OF INTERACTION RECORD (FAIR). DISCUSSIONS DEALT WITH SUCH PROBLEMS OF FILM RATING AS RATING JUDGMENTS, RELIABILITY, REACTION TIMES, CATEGORY CHANGES AND REFINEMENTS, SOUND EQUIPMENT, TRAINING FILMS, AND SCORING MACHINES. RELATED REPORTS ARE AA DOD D26 THROUGH AADDD D31. (AL)

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

BR- 5-0249-8 OEC-6-10-108 BA.24

APPENDIX H

<u>RICKI</u>: Deidre Handy <u>DON</u> Melcer <u>Sheila Whitesides</u> <u>Patricia Baldwin</u> Lynn Jackson Jeanne Amacker Wilda Jackson

The Development of the Mechanics of Film Rating

Ricki - The question we are talking about now is the mechanical procedure of rating films. Where did we start Last September - and try to figure this thing out and so before we had the marked paper we had what?

Don - We had the Amidon-Flanders scale

- S We started rating initially with the yellow sheets marked with numbers
- R That's what I thought
- S And then we had trouble with the three seconds
- R You know we started out with just a sheet of paper with numbered blanks on it and we tried to put a number from the Amidon Flanders scale into each blank every three seconds.
- S That's right
- R And then as I remember the first problem we had was that we couldn't do it.
- Don And then Sheila made a tape where she called off every one, two and three seconds and that didn't work either.
- S And then before that I used the stop watch too, remember?
- D Oh, yes!
- S And we stopped every three seconds for a while, too.
- P We started at three and then we went to ten seconds.
- S We tried stopping the projector and discussing what we had seen before.
- R Then every three seconds was marked first with Sheila hitting the table every three seconds with a pencil and then with a number spoken



on a tape that ran the same time as the film.

Lynn- And then the next thing that we did was to go ahead and rate it at the time of the reaction we had and then every ten seconds we stopped and talked about what we did.

Ricki- Now let's go back a little bit- why didn't that first three second thing work?

Pat- I think it was probably because of our- I think that probably now we ...

Don- Well one of our problems was that when the three second interval came around, what portion did you rate? what was going on during the three seconds or what went on at the time the thing happened.

R- that was why we started getting Sheila to hit the pencil- to get us synchronized in rating.

D- That's right.

R- The same second - so we could get reliability

D- Then we decided to disregard what went on and rate every three seconds kinda interval judgement and nobody liked that because sometimes nothing went on and it was confusing. We did miss one point- we changed from numbers to letters on the scale. We revised that back there from the Amidon Flanders.

R- By letters

D- The categories one, two, three, four, and five to letters.

R- Yea, a,b,c,d

R- The reason I am asking this is that I realize that this is going to get transcribed by someone who doesn't know what we all know and we need to get real explicit now.



Don- We changed to letters which kinda stated category N for F for feeling D for direction and L for lecturing.

R- and way back there on the three seconds what was confusing us? You remember, Beulah, we talked about it?

R- I mean at first what kind of panic ......

Everyone-Well, I couldn't do it- it was terrible-well about a ten second interval was as long as we could keep it up

R- Remember, at first we stopped every ten seconds and let everyone get their nerves back.

Yea.

Don- On the technical side, we decided then to design a machine which would move the paper forward and in a quick motion every three seconds. Ricki- We worked on the sound thing first- our sound equipment - didn't we?

Don- Well, this was going on concurrently. It turned out that we gave up the thing before the machine ever got designed. Machine #1.

Ricki- I don't remember machine # 1.

Don- I do.

Pat- That first one rating we had back in the room. The meeting about the ratings, by Sheila's desk and Judy'd desk- I sat in on the last of it- this is where the first talk of some kind of machine was going on. Group- With a rod all the way through. We talked about using the type-writer platens. And all kind of things, yeah..

Don- I was glad when we abandoned that.....

Ricki- And what was the problem that we were trying to solve there?



At that time what did we see as our problem in trying to rate? Well, of course, our frustration- we couldn't do all of these MOTOR things and find our little mark. So what we were trying to solve here was to get the paper to take over some technical jobs we were trying to do. Lynn- And also like we were trying to count three seconds between and we weren't.

Ricki- Yeah

Lynn- Which is still our problem.

Beulah- We found that thinking couldn't be interrupted by a clang in the middle of it.

Ricki-Yes, but I think that came later, though. I think that came after we had our sound equipment, because at first we were actually and then we decided to rate when the behavior changed. Way back at the beginning we were doing it righter than we were doing it for about three weeks in there. Before we ever tried to get time into it - three second intervals, we were giving a rating every time behavior changed.

Don-Yeah, but we were doing that first on every ten seconds and we were averaging about three ratings for every ten seconds and then we decided that we could go on and do it like the Amidon Flanders thing and do it every three seconds. Which was about the same number anyway, and so ...

Ricki- And Judy said that in the final learning session that we should practice it in its final form or you would never learn it. If three

seconds was our goal we had to start doing it at three seconds from the

very beginning. And so based on this theory we plunged into the three

second thing and tried to gear everything else to this .

? - and it didn't work?



Ricki- And it didn't work? Why didn't it work? It was the motor problem --- it was just simply the frustration, we couldn't watch the films and look down at our papers and try to mark it on our papers at the same time and still watch the film.

? - What's the difference in the action going on in the different films? Some of them would be slow action and some fast action and some would have a lot going on.

Ricki- And what other problems did we find at that point?

Don- Well, the one you pointed out has been solved mechanically, so that wasn't the final reason for banning this. The final reason was that if you do it on a three second interval you have to decide exactly what you are going to rate. If you are going to make it one mark for every three seconds and three things go on in this three seconds then you have to decide which of these three things you were going to rate and this boiled down to what you would rate at that moment - what was going on at the moment and disregard everything else.

Ricki- That's right and what we were trying to do was cue in two different things. When that pencil hit we were supposed to make a rating, but what we found in fact was we were thinking of a rating and waiting for the pencil to hit and this was fine, but it wouldn't come and then the action would change on the film and the pencil would hit and we still had this old rating in our minds of what had happened before and we couldn't handle it cognitively.

Group- Umhum

Don- So then it was just about a month ago that you decided to go ahead and just rate it as it occured.



Lynn- And when we first did that, we felt like we had finally rated the film for the first time.

Ricki- Yeah, umhum, and what would you guess ---- this took us about six weeks to start - four weeks.

Don- about three weeks.

Ricki- Three weeks! About the last week in October then we came up with this, huh?

Don- It was four weeks ago.

Ricki- Then it didn't take us forever.

Don- It was a couple of weeks that we actually struggled through Ricki- Is that all? It seemed like months.

Dea- And then we started out with the actual training on the basis of rating whenever you saw action and then moved it into training films.

Remember?

Ricki- Yeah and what we were doing was a - what we changed then was instead of a mechanical cue on our parts such as a called out number or pencil hitting the table the cue for response came from the film itself. A change of action.

Don- A change of action.

Ricki- Our field of attention didn't have to be changed.

Don- Hum

Ricki- Our direct field of attention was our cue for a response.

Lynn- Is this where we had sound equipment?

Ricki- No, I don't guess we had - when did we decide we had to have sound equipment?

Pat- We decided that right at first - we decided when Dr. Holland was still in there.



Don- We couldn't hear.

Pat- And he was just in for a couple of sessions - I think it was about a week or so before we got it actually.

Ricki- And so we found that sound ...

Don- Let's specify that by sound equipment we mean individual earphones. Ricki- Earphones.

Don- For every rater.

Jeanne- Also we were still clarifying the different feelings of interaction we finally decided that the category <u>Work</u> could stand for when the children were actually doing something.

Ricki- Yeah, I think we are going to try to do that separately -- talk about our changes in the rating scale. We are just trying to get the process now.

Pat- We can do that as we .... on, Ricki.

Lynn- Well, the volume on the headphones of the individual raters was the only thing we had trouble with.

Ricki- And another thing we found that the headphones did was that they helped again to get at this central thing we were trying to do which was to make the experience a whole realistic one which put the sound in our heads.

Lynn- They cut you off from everything else.

Ricki- And allowed you to just be in the film and attend to it.

Don- Especially with those particular earphones, I felt contact right up to the cortex.

A lot of laughter.

Ricki- And they helped that way , you know.



Pat- I think something else that helped me too was having a room. Having a room where people don't come in and out.

Ricki- Where you can leave your equipment set up all the time.

Pat- And it also gives us more light having that window: in there.

Ricki- The light problem was a big one to try to solve.

Don- There was another problem in there - we ruined one projector by running it back so much.

Sheila- Yeah.

Don- When we were working out the rating scales.

Ricki- And so then in training what we were doing was with our earphones. and with letters which helped us remember our scale a little better and also by this time we had all learned our scale which was kinda of an unadmitted problem at first, but none of us had really learned the scale. I'm not sure that we could have though.

Lynn- That wasn't something we could have learned.

Don- This came up, this scale, that we actually worked out was the Amidon Flanders as a basis. But I feel that we actually went through a process of evolving a new scale and a method of rating. It's brand new.

Lynn- That's a wonderful example of cognitive learning hooked up with SR response. Learning category labels and the "paper meaning" is one Sr response set to be formed and also an Sr response of marking a letter when you see an action on the film - but a higher level cognitive functioning intervenes in learning the results subtle meanings of the categories. This higher level can not be attained without having the experience of seeing the film action.



Ricki - It was like we had to learn the scale on paper and then it was like we had to learn it all over again on rating films.

Lynn - That's really a high cognitive example of the SR basis...

Ricki - Yeah, the way that I envision the paper that will be written out of this is an example of cognizant levels of cognitive behavior, huh? Fitting the task of what to these levels that go along.

Lynn - But somebody could come along that hasn't had it and say oh, no, that's not the kind of cognizant function you had there.

Jeanne - This cognizant assumption, I'm not sure exactly what that is, but it sure has called my attention to my professors right now - their responses to what we do in class.

Don - Sharpens your perception.

Jeanne - Right; it sure has.

Ricki - Now, what else was going...Oh, then what else we started doing was ten minute color film made in '60 and '61, and how long should it...it took us what...two weeks before we could even go through and rate a whole film.

? - ... Before we could stand it.

Ricki - Umhuh...before we could stand it.

Don - Then at this point we started working on the kinds of machines which would move a piece of paper along at a constant rate of speed so that the person still wouldn't have to look at the lines to make their ratings. That's a story in itself.

Ricki - Umhum.

Lynn - Shouldn't we say something about overcoming our feelings?



Ricki - Yeah, to me this was the big thing that was going on...was the fear...or, I don't know just what it was; I kept feeling it had something to do with frustration..

Lynn - ...feel like you were about six steps removed from what you were doing.

Ricki - Yeah.

Lynn - You had to do the ratings of them, or they wouldn't be done, but still they seemed so far away.

Ricki - Well, how did we overcome that? I feel that it is overcome now, and I don't really know how.

Pat - I feel we have a pretty open group. You know...as far as...

Don - Well, one thing I think that we could see was that the reliabilities were going to run smooth enough to let us know that we were going to be able to rate films and get a meaningful scientific job of it. For a while there was a lot of doubt as to whether it was going to be...you know, worth anything.

Ricki - So then it was this other thing, too...making the scale really applicable to the task we were doing. That - closer to solving these mechanical problems. And this was done by becoming a real team, huh? All that talk that felt so frustrating really had a lot to do with our beginning to feel that we could do this job. Pat - You know what I felt at first? I never really felt that it couldn't be rated. I kinda felt like...well, like I just wanted it to be done like I wanted it to be done, you know?

Ricki - Yeah.

Pat - It would be all right...and then what I think we arrived at



with everyone talking and expressing themselves is a content attitude, and I think that maybe, even if someone takes our manual, this might be a scale that may not be an absolute thing.

Lynn - I think that everyone would want their own manual. I feel like it is only today that we have a real positive feeling toward rating films.

Ricki - Well, remember the day that we did the first...the film of the "starfish" girl? That was the day we began to feel...and I think it helped she was a good teacher. I don't know why it was a hard one to rate in a way.

? - ...so much happened.

Lynn - She was the first really good teacher we had seen.

Pat - Yeah.

Ricki - So we would recommend that, huh?

Pat - Yeah, I think it would make you feel better with your rating if you see a good teacher; good in the sense that there is a lot of...maybe there's nothing bac going on...she wouldn't be a good therapist or anything, it's just that a lot of activity and smiling people and everything...you know...

Ricki - Well, could it be that we relate so closely to the film with this close sound equipment and the dark room and everything that if we are watching someone who has a positive regard for the students she is working with at this point, it might somehow generalize it to us?

Lynn - Yeah, that could have been.

Ricki - ...and that somehow we become better students just like the



children in the film do.

Pat - I don't know...

Ricki - ...because we sure had some frustration with bad teachers.

Pat - But I don't know whether it's that...it's more like we're frustrated, and we see a situation that we think is bad, and we've got our bad feeling about what we're doing and we've got this lousy teaching going on, and everything is just bad.

Ricki - Well, I think just the opposite of this, Pat. I mean the other side of this coin; the same coin, but it's the good things go on, we feel good...if bad things go on in the film, we feel frustrated. Lynn - If this had not come at a ...maybe this came at a pretty crucial point, rather than...maybe if we had started off with good films, maybe build up some kind of negative response to films, but we would view with frustration even the good films; whereas, the good films in the latter part can be reinforcing. I wonder.

Don - Well, it's interesting, because I thought on some of the training films, the color films - they were generally good, and there wasn't too much bad stuff in that. You are talking now about when we got introduced to the black and white.

Ricki - No, this was a color film. The "starfish girl" was a good color film.

Sheila: - She was preceded by the person with the beads. The girl with the coral.

Ricki - Well, the "starfish girl" was...we felt was a good teacher.

Jeanne - Well, we had one criticism of her. She called coral

"seaweed".



Don - This was technically incorrect, and we used this for a TAF rating, and we are getting way off content.

Ricki - Yeah.

Don - Right now, we used this in a TAF rating in a TAF team, but she was so content incorrect to me, she was bubbling and running all around the place, but everything she was saying was wrong.

? - Well, I guess for the rating was what we were rating was her positive...well, I guess as far as rating goes, I guess what we were responding to was her positive regard.

Don - Regard...

Sheila - I thought of something else that helped, too. When we divided up into teams, that helped an awful lot, and then something else I don't think I would have a very positive feeling about this if I didn't like the other raters.

Ricki - Yeah, I think thatis what we have been saying in a lot of ways.

Sheila - If I didn't like the other raters and they said something that disagreed with me, I wouldn't like them, and I wouldn't be happy about it.

Pat - Is this saying that if you have a very hostile feeling, covertly, toward another rater, don't rate because your reliabilities could go way down.

Ricki - Umhum.

Pat - Well, then, this might be an important criterion.

? - Well, all the things we do...

Sheila - Well, if you just don't basically like each other as a group you might just as well forget it.



Pat: Then how could you take some of the things that we have said because we have disagreed with each other so vehemently at times that if there was a basic dislike there would be a really -

Don - Yeah, I remember the time that I got the most - really felt the most enthusiastic and bubbly and all that stuff was when we did go to work on TAF's and come out with fantastically high inter-reliability on about the second go-round you know. (everyone) And, I don't know, maybe that is where I am trying to get the TAF into here because it seemed to come along pretty much after the point where we started rating with the moving paper which ended up not working, but when we had to abandon that thing and start working on the final draft of the machine, then didn't both teams start working on the TAF?

Sheila - No, we worked on - don't you remember at the very first meeting she said we are going to do three things to rate the films, the TAF, the Ryans scale and the Amidon-Flanders and we decided which order they would be in and the Amidon, the TAF, and the hot-warm, the hot-cold thing and then we just all tackled the Amidon-Flanders and when we began to start and get familiar with that, that was when we went on to the TAF. That has only been recently.

Don - You have only had one session.

Sheila - Well, our team, anyway has just been recent with the TAF.

Ricki - Yeah, well, we have only been working on the TAF for the last,
what, ten days. But I think when we got to feeling real good was when
we made the film for the demonstration and we got to try what we thought
was our reliability was real high so we wanted to share this and see if
it would hold up with everybody there - so we saw the same ten minute



film three times and agreed on a rating for the whole film on Amidon Flanders. And then we presented it on that Friday morning and it was at that point that we really thought we could rate films.

Pat- I feel that probably still if we work out the scale then we will be.....

Pat- You know not....

Ricki- And then from there we started - well started with Jeanne and Pat some, too.

Pat- I missed a week

Ricki- Yeah

Pat- Came back when you had switched

Ricki- Yeah, uh, huh, and Pat was the first one we tried it with and Jeanne the second - to try to teach the whole business we had been through. By just having someone sit down and copy the letters, the ratings as they were spoken to the film and not try to think at all themselves and I think that Pat thought she caught up with a week's work in what-just an hour or so- and helped that way and how did you feel about it, Jeanne?

Jeanne- I liked it, I felt real good about it. I didn't know what I had walked into when I first got there, but it felt natural, felt real natural.

Ricki- I think this is something else we want to do- get that thing really fixed and may be on a film- I have been thinking that maybe on a film have a wider range of behavior than on feedback. The scale- and we changed our scale some - seems to me that this is something we ought to do- take one of those color films that has a wider range . I don't



think we did it on the starfish.

? - Umhum.

Ricki - Did we do it on our...

Sheila - I gave you a demonstration on the starfish, remember when we were going to rate that film again, I said I can't, I have seen it too many times; I don't want to see it anymore. The Starfish Film... I think that's the one I demonstrated with.

Don - Well, the purpose of the tape we have run over something that we got to go back and fill in a little bit because one thing that you decided to do was...well, it was decided, anyway...to have segments spliced into this training tape every thirty seconds...or minutes?

Ricki - Into the training film...

Don - ... the training film. Every thirty seconds was it?

Ricki - A number...

Don - Yeah.

Ricki - That's right.

Don - In this way when you were training, you could do thirty seconds and let everybody put their rating down or call them out, and then if there were any questions you could go back from that point or later on you could back up to that particular number, and the training film was to be broken down into numbered segments so that you could stop and give people a breather and check out things and answer any questions and then go ahead.

Ricki - This came up because somebody would say, "I disagree here," and we wouldn't know where "here" was on the film. We would know



where it was on our rating scales, and we would have to run back through the film and work the film out and break it and look all over the place.

Jeanne - The films are spliced now in thirty minute segments?

Don - Andy was going to do one like that.

Ricki - We just didn't do it. We talked about it and thought it would be good and just didn't do it. Another thing we did in training was we would take turns in calling out...one person would call out their ratings of the film as we went along.

Lynn - That was one of the most helpful things to me.

Ricki - Most helpful for me, too. Then we would stop after thirty seconds of this and someone else would take over and call out their rating.

Lynn - You know what that does? It makes you more personally committed to rating yourself, too.

Ricki - Yeah.

Lynn - You stop just sitting there...

Ricki - You stop confronting your paper...yeah.

Lynn - It's not nearly so boring...

Ricki - ...not nearly so what?

Lynn - ...so boring.

Ricki - Yeah, and defeated.

Jeanne - You know, I hope we don't splice the numbers through because it would be as visually disturbing as the pencil was audibly disturbing.

Ricki - Well, these numbers were just for demonstration films where



we would bettraining people.

Don - It wouldn't be for all of them.

Ricki - Umhum.

Don - strictly for the training films.

Jeanne - Well, you know when Don runs the training films, he just turns the film off and we discuss the thirty seconds.

Ricki - Yeah, we did that, too.

Don - What Ricki is getting at is that somebody would say, "Well, back there that teacher said," so and so; and that's what we ran into, and you keep trying to figure out where "back there" was, and you can't; and this didn't happen when people were really trying to understand what the differences stood for what the little nuance question and directions and directions for them and things like that. And we had to back up and try to find it, and the numbers would do that, and once you had all of these things zeroed in and then you wouldn't need them anymore.

Sheila - We also ruined a projector that way, too.

Don - Yeah.

Ricki - So then, we feel that there are two things that are essential.

Well, three things are essential for training, one is enough discussion of what is going on and a sharing of feeling among the members of the team so that everyone begins to feel that he can disagree at any time about anything. That there is nothing too small or too big that you can't disagree about it. So this is some kind of rapport which we have decided came through our ability to learn to disagree with each other, huh? Somewhat...



Lynn - I had to admit that I felt frustrated...sitting there feeling guilty about it.

Ricki - Yeah, and we can't...

Sheila - Yeah, like everyone else is all excited, and I think it's horrible.

Everyone - Umhum.

Ricki - And then another thing is the training film. That is, trying it by rote...just sitting down and copying it by numbers - I mean, letters - spoken so you have at least done it successfully, even though you weren't thinking while you did it. It gives you a sense that it can be done; and then, another thing was speaking out your response aloud to the team as you are rating and then stopping and talking about those and sort of building up reliability in thirty second segments in that way.

Pat - Another thing we did was to mark and...our people feeling free at any time to say "stop"...you know, the film...right now.

Ricki - That took a while in itself, didn't it! It seemed to me that everyone was afraid to say "stop," so we would all go beyond our endurance.

General laughter...

Lynn - I think that sort of stuff is really kind of important; it kind of previews you to write the film... You know, you can get our...

Laughter...

Don - Well...

Ricki - Have we caught everything up to where we got our machines? Can you thing of anything, Sheila?



Sheila - Only one thing I can think of. Didn't you say that if a person would call out their ratings aloud with the team, it would influence other members? It seems like I remember you saying once that you would call these out as we were going along, and Pat said what I was thinking, that...well, it would be much easier to put down what you said...your "D," rather than my "L."

Pat - This was when we were thinking about doing this as a permanent thing, instead of writing...I would tend to put down what someone told me to put down. We ought to make it very clear that this is for training purposes right at first.

Sheila - Yeah, and you could not continue very long with this; not with any individual.

Ricki - No, no, oh no...and that this be traded off.

Pat - That's right.

Ricki - I feel like I did too much of it there for a while.

Pat - Well, at first you were doing all of it, but we were at a kind of a different idea there. We started practicing, and then I think we started getting more relaxed, too...I think at first that no one wanted to take the responsibility of...you know, of calling their own numbers out. I know I didn't. I didn't mind writing them down, but I didn't want anyone to ever know...

General laughter...

Lynn - That's the first time that I ever really felt like anybody agreed with me because before...it was like we agreed, but there were things in between...I mean, we might have a "Q" and an "E", but we had six letters in between; but here, the calling it and we agreed



makes you feel...

Ricki - Then what we are saying is that in training it is real important to get reinforcement wherever and in any way you can, because that really is pretty insurmountable when you start out.

Lynn - 'Made me think it wasn't going to work.

Ricki - I really felt like Lynn. I really felt that we weren't going to be able to do it when we first...well, I would feel that it would one day, and then, the next...well, it just couldn't be done, this three second stuff; I can rate thirty seconds of film; I can't rate fifteen minutes of film.

Beulah - Even when I would come in...always behind because of my schedule...I could see so much progress and it would make more sense to me, and that maybe I would be able to do it, too...that I would be just like this, and you all would be all so disgusted because you just kind of had lived with it, and I could kind of retreat, and I could see this progress, and I was so proud...when I had gotten here, and I would say, "I can do this someday." I could see your progress every time I came.

Ricki - We would see it in moments, and then we would...well, the categories were giving us trouble, too.

? - Yeah.

Sheila - We just now got our separate ideas straightened out. Not more than a week and a half ago.

Ricki - Yeah.

Sheila - One thing about two teams...they were once elementary and secondary, and they are no longer elementary and secondary; they are



just teams.

Ricki - Yeah, that was another thing, too. And why did the dividing of the teams help, too, Sheila?

Sheila - You could belong to a little group...

General laughter...

Sheila - Even now, I say, "Secondary team is meeting in the afternoon"; you know, "I belong to secondary team; I don't belong to elementary team." Ha! You know...it isn't really that bad as it sounds, it's just, you know.

Ricki - Yeah.

Sheila: You had your bunch of people and you know what they thought and you felt secure in little V-Hall - you know, there with your little team. I did.

Lynn - Didn't you feel that you had to be there all the time?

Ricki - Yeah, we found that our sessions were running too long - a three hour session at one time was impossible.

Lynn - That was one thing that we just agreed among ourselves that ought to go down.

Ricki - A two hour session is maximum and if you have accomplished nothing, then you still quit.

Sheila - That would make me feel good too - you know, let's quit after so long.

Ricki - I thought that that was the time that Lynn felt like she could somehow join the group, I never knew why, but -

Lynn - Well, I think it was hating to have my Friday afternoon's taken up.

General laughter



Ricki - Now, we have just incorporated that, if we don't announce when a meeting is starting, we absolutely announce when it is ending and we keep that ending time if it is in the middle of a film and we don't start to film if it would run us over. And so this has something to do with respecting our weaknesses - our attention span just can't last for the length of time it would just have to last for a very long period of time.

So we are up to where we are now

Don - Yeah, perhaps you ought to put in there why we had to abandon the machines.

Lynn - You might want to describe the machines.

Sheila - Have a picture

Don - We ended up with four separate machines with tapes which ran at four separate rates of speed and we had a switch arranged so that when you switched on the projector you could switch on these things simultaneously and it turned out that there was no way to get these things exactly accurate and so that meant that we had to design a machine which somehow or other could afford perfect synchronization and grader ratings because just the slightest little bit of difference would throw the whole thing off and that's why we quit and haven't been doing anything for a week.

? - Well, has Jim Felts come up with a machine that

Don - He's working on it, yeah - it's real interesting. This was an accidental product of one of Frances's.

Ricki - It was an idea you had way back at the beginning, Don, to run the sheets of paper across

Don - No, listen, Frances had this idea - I thought the possibility of



trying four machines together so that we would have one drive and it turned out that we got four machines that turned exactly 1 rpm and they were accurate - the point was that the machines were internally inaccurate.

Ricki - And it was too slow

Don - Also it was too slow and we speeded it up for technical purposes from six inches per minute to 10½ inches per minute and that's what the final speed will be.

Ricki - Because when there was lots of activity on the film we were writing letters

Don - They would pile up on each other

Ricki - And another thing we found we were doing was that if that paper wasn't exactly right you had to watch it and if you were watching it, you weren't watching the film and it was moving so slowly that we had to watch the paper so we wouldn't mark letters on top of each other.

? - Are our new machines going to have a little bitty space where we can write letters?

Don - Uh-huh - a little bitty space - it will be a box - you may have seen the thing down there - it's about this wide and has legs on it and the machine itself will be one long table and the four raters will just move their chairs up to this table and the little hole here for this rater and one position and there are four positions on the tape and one piece of adding machine tape is fed by motor-driven... and it just runs along this little tray here, so that everybody is rating on the same sheet of paper so that this means that synchronization is perfect; you can't miss.



Ricki - If one pencil slows down the paper it slows down for every-body.

Don - It slows all of them down, but Jim is working out the kind of drive mechanization where paper will tear before it will slow down. Laughter...

Don - This has been fascinating to me to see how all of these cognitive things that we have evolved reflected in the kind of machine we ended up with. We started out with the content that the deal was on a solenoid which would be moving four little pieces of paper forward every few seconds, and now we have ended up with one band of paper where four raters rate simultaneously.

Lynn - I don't believe we have ever said why it was we needed the synchronization.

Don - Oh, that's your department.

Lynn - Because we get these four nice long sheets of paper and try
to figure out what responses came at the same or came to the different
raters from the same stimulus and you couldn't do it. You could get
different kinds of ways to score this thing, then you might as well
know for sure what it is you are working for.

Ricki - And one of the ways we tried to fix them for you was for someone to call "Mark" every so often. And finally got down to a "beep" every ten seconds, but that still didn't help too much with the tapes.

Pat - I think it is very important...sticking to this idea of concentrating on just one thing.

Don - Yeah, this is what...this machine has finally evolved out so

that it can do this job...all you will have to do is two things: look at the film and sit there and write letters without looking. They will be in the right spot and they will be synchronized with everybody else.

? - That reminds me of something else, too...you know those machines we had at first that were rectangular and long...they took up so much room on top of the desk that they interfered with plugging the earphones into the projector.

Don - Umhum.

Sheila - I liked the little ones so much better because that room is so cramped. I didn't like all those wires. If you could avoid the wires.

Ricki - We need a bigger room; we really do.

Don - Incidentally, the earphones now when the final machine is finished...you will have your plug right in front of you, and this thing has a tray for all of your pencils and papers and your earphones plug them right in; they don't have to be unwired everytime you walk off.

Jeanne - I still don't understand what the paper is going to look like when the rating is over...you pull out this one big sheet of paper and what is it going to look like?

Ricki - One rater starts here and here and the next one here.

Lynn - You have four rows on one sheet of paper, and what you do will split it and make...

Ricki - ...long-way...

Jeanne - And you will just match them up?



Don - You will just match the starting marks, and then everything following has to be synchronized.

? - That's going to be a lot of trouble.

Ricki - Well, I was thinking the best way to cut them would be to line them up, and then you could have a razor blade and run it back through again.

Don - You get a little old crank and four razor blades and crank it through there...take...you maybe, in fact you don't even have to have a crank; you can just have a little gadget with a little lid over there and drop the paper in and throw the lid down and zip the paper through there, and you've got four strips.

Lynn - You're sure going to have to have sharp razor blades.

Ricki - You sure will!

Various jokes...

Ricki - Is that it? Are we up to date?

Don - I think it would be good to point out that so far in this we have not rated one official film.

? - You had to contaminate this.

Ricki - Well, we tried. We completely rated one film, TAF and...

Don - Oh, we've done it...

Ricki - And it was a real film, and we got it together, and the machines weren't synchronized, and Lynn couldn't work out the reliability...

Don - Yeah, we did that, too, but what I am saying that in spite of the fact that we are right at the point where we feel like we could do it, we have never actually finished.



Ricki - We have never gotten the data back.

Everyone talking at once, and laughter...

Don - Speaking of hostile feelings, though, I remember that when we did that one...well, Lynn, this had better work, and she said it wouldn't, and I thought...

Laughter...

Ricki - Well, we did get our reliability back on our TAF's...

Don - Oh, yeah.

Ricki - Ours wasn't tremendous, Don; I don't know about yours...

Don - Well...

Jeanne - Well, we changed ours; I would go a little bit more to the "three" if...

Don - Our ratings...we had one there that was perfect agreement, and we had two and one or all together...

Ricki - Well, we had four people on ours, and I think only five of the combinations came out significant...

Don - Hmmm?

Ricki - Hmmm?

? - Yeah.

Don - What are you using for significance?

Lynn -  $.05 \pm .$ 

Ricki - And she just does it...

Don - What were the coefficients?

Ricki - Let's stop this thing first.

